

Notice of Allowability	Application N .	Applicant(s)	
	09/991,231	CAO ET AL.	
	Examiner	Art Unit	
	Hai L. Nguyen	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 05/12/2004.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ The drawings filed on 06 February 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☒ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

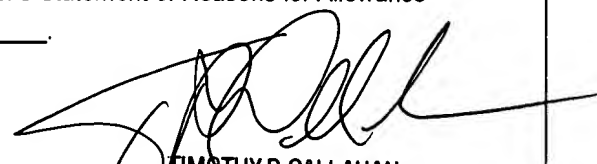
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


 TIMOTHY P. CALLAHAN
 SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Response to Argument

1. Applicant's response filed on 05/12/04 has been received and entered in the case. Applicant's arguments with respect to the prior art rejections are persuasive and, as such, the prior art rejections have been withdrawn. Therefore the case is found to be in allowance condition for the reasons as set for below. In view of the inclusion of all of the limitations of new added claim 13 within claim 4, which has been indicated allowable in the office action mailed on 03/12/04, therefore, claim 13 is also allowed.

REASON FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

The prior art of record does not disclose or suggest an apparatus (as shown in Fig. 5), as recited in claim 1, comprising a tapped delay circuit (60) including a plurality of tapped delay cells, the tapped delay circuit receiving a first pulse signal (CLK_CNT0) as input; a plurality of sampling modules (55s) concurrently receiving a second pulse signal (CNT0) as input, each sampling module receiving the second pulse signal as input while the first pulse signal propagates through the tapped delay circuit, and each sampling module being clocked by a tapped output signal (CLK0-CLK31) from one of the plurality of tapped delay cells; an encoder (57); and specifically the limitation directed to a conditioning circuit (51-54) that receives a clock signal (CLK) and outputs the two pulse signals (CLK_CNT0, CNT0) which has a very specific relationship (as described in the specification; page 10, lines 6-21), so the encoder can

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generates an output value (PVT) based on a number sampling modules that lock into the second pulse signal.

Claim 8 is allowed for similar reasons; note the above discussion.

The prior art of record does not disclose or suggest an apparatus circuit, as recited in claim 13, comprising a variation circuit (70 in instant Fig. 10) for receiving the generated output value (PVT) and comparing the generated output value to a previously stored maximum output value (PVTMAX) and a previously stored minimum output value (PVTMIN), wherein, if the generated output value is less than the previously stored minimum output value, the generated output value is stored as the minimum output value, and wherein if the generated output value is greater than the maximum output value, the generated output value is stored as the maximum output value.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 571-272-1747 and Right Fax number is 571-273-1747. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The official fax phone number for the organization where this application or proceeding is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1562.

HLN 

June 20, 2004